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FIFTH SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT
Examining Group 1637
Patent Application
Docket No. G-101US05REG
Serial No. 10/051,681

Frank C. Eisenschenk
Frank C. Eisenschenk, Ph.D., Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner : Kenneth R. Horlick
Art Unit : 1637
Applicants : Daniel Cohen, Ilya Chumakov
Serial No. : 10/051,681
Filed : January 16, 2002
Conf. No. : 1458
For : Treatment of CNS Disorders Using D-Amino Acid Oxidase and D-Aspartate Oxidase Antagonists

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FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§1.97 AND 1.98

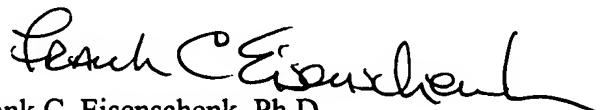
Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. A copy of each cited reference is enclosed. However, Applicants have not submitted copies of the U.S. patents or U.S. published application cited on attached Form PTO/SB/08 pursuant to the Notice at 1276 OG 55 waiving the requirement set forth at 37 CFR 1.98(a)(2)(i).

It is respectfully requested that the references cited on the attached form PTO/SB/08 be considered in the examination of the subject application and that their consideration be made of record.

Applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



Frank C. Eisenschenk, Ph.D.

Patent Attorney

Registration No. 45,332

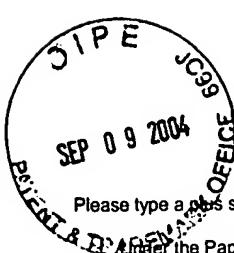
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet

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Complete if Known

Application Number	10/051,681
Filing Date	January 16, 2002
First Named Inventor	Daniel Cohen
Group Art Unit	1637
Examiner Name	Kenneth R. Horlick
Attorney Docket Number	G-101US05REG

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
U1	4,279,917			Takami et al.	07-21-1981	All
U2	4,491,589			Dell et al.	01-01-1985	All
U3	4,604,286			Kawajiri	08-05-1986	All
U4	5,605,818			Katsumata et al.	02-25-1997	All
U5	6,013,672			Ye et al.	01-11-2000	All
U6	6,084,084			Stormann et al.	07-04-2000	All
U7	6,001,575			Huganir et al.	12-14-1999	All
U8	6,362,226			Phillips, III et al.	03-26-2002	All
U9	5,789,444			Choi et al.	08-04-1998	All
U10	5,447,948			Seibyl et al.	09-05-1995	All
U11	5,089,517			Choi et al.	02-18-1992	All
U12	5,670,539			Richardson	09-23-1997	All
U13	6,620,850	B2		Martynyuk et al.	09-16-2003	All
U14	2003/0216472	A1		Martynyuk et al.	11-20-2003	All
U15						
U16						
U17						

FOREIGN PATENT DOCUMENTS

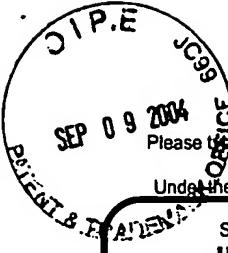
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
F1	WO	03/024443		A1	Univ. of Florida	03-27-2003	All	
F2								
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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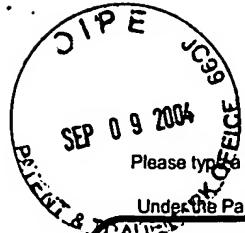
NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	R1	CHIARONI, P. et al. "A multivariate analysis of red blood cell membrane transports and plasma levels of L-Tyrosine and L-Tryptophan in depressed patients before treatment and after clinical improvement" <i>Neuropsychobiology</i> , 1990, 23:1-7.
	R2	DOLLINS, A.B. et al. "L-Tyrosine ameliorates some effects of lower body negative pressure stress" <i>Physiology & Behavior</i> , 1995, 57(2):223-230.
	R3	EATON, S.A. et al. "Competitive antagonism at metabotropic glutamate receptors by (S)-4-carboxyphenylglycine and (RS)- α -methyl-4-carboxyphenylglycine" <i>European Journal of Pharmacology-Molecular Pharmacology Section</i> , 1993, 244:195-197.
	R4	GAGLIARDI, R.J. "Neuroprotection, excitotoxicity and NMDA antagonists" <i>Arq Neuropsiquiatr</i> , 2000, 58(2-B):583-588.
	R5	GALLOWAY, G.P. et al. "A historically controlled trial of tyrosine for cocaine dependence" <i>Journal of Psychoactive Drugs</i> , July-September 1996, 28(3):305-309.
	R6	GELENBERG, A.J. et al. "Neurotransmitter precursors for the treatment of depression" <i>Psychopharmacology Bulletin</i> , January 1982, 18(1):7-18.
	R7	HAJAK, G. et al. "The influence of intravenous L-Tryptophan on plasma melatonin and sleep in men" <i>Pharmacopsychiat.</i> , 1991, 24:17-20.
	R8	HELLER, B. et al. "Therapeutic action of D-phenylalanine in Parkinson's Disease" <i>Arzneim.-Forsch (Drug Res.)</i> , 1976, 26(4):577-579.
	R9	HOLLMANN, M. et al. "Cloned Glutamate Receptors" <i>Annu. Rev. Neurosci.</i> , 1994, 17:31-108.
	R10	KNOPFEL, T. et al. "Metabotropic glutamate receptors: Novel targets for drug development" <i>Journal of Medicinal Chemistry</i> , April 1995, 38(9):1417-1426.
	R11	MAIESE, K. et al. "Group I and Group II metabotropic glutamate receptor subtypes provide enhanced neuroprotection" <i>Journal of Neuroscience Research</i> , 2000, 62:257-272.
	R12	MEYER, J.S. et al. "Neurotransmitter precursor amino acids in the treatment of multi-infarct Dementia and Alzheimer's Disease" <i>Journal of the American Geriatrics Society</i> , July 1977, 25(7):289-298.
	R13	OBRENOVITCH, T.P. "Excitotoxicity in neurological disorders—the glutamate paradox" <i>Int. J. Devl. Neuroscience</i> , 2000, 18:281-287.

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Attorney Docket Number	G-101US05REG

NON PATENT LITERATURE DOCUMENTS

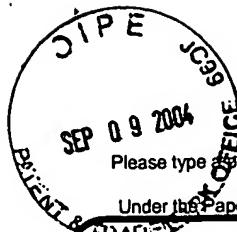
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	R14	SAPOLSKY, R.M. "Cellular defenses against excitotoxic insults" <i>Journal of Neurochemistry</i> , 2001, 76:1601-1611.	
	R15	SCHOEPP, D.D. et al. "Metabotropic glutamate receptors in brain function and pathology" <i>TiPS</i> , January 1993, 14:13-20.	
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	R17	WATKINS, J. et al. "Phenylglycine derivatives as antagonists of metabotropic glutamate receptors" <i>TiPS</i> , September 1994, 15:333-342.	
	R18	ZIPFEL, G.J. et al. "Neuronal apoptosis after CNS injury: The roles of glutamate and calcium" <i>Journal of Neurotrauma</i> , 2000, 17(10):857-869.	
	R19	BELARDINELLI, L. et al. "1,3-Dipropyl-8-[2-(5,6-Epoxy)Norbornyl]Xanthine, a Potent, Specific and Selective A ₁ Adenosine Receptor Antagonist in the Guinea Pig Heart and Brain and in DDT ₁ MF-2 Cells" <i>J. Pharmacol. Exp. Ther.</i> , 1995, 275(3):1167-1176.	
	R20	CHOI, D.W. "Excitotoxic Cell Death" <i>J. Neurobiol.</i> , 1992, 23(9):1261-1276.	
	R21	DENNIS, D.M. et al. "Homologous Desensitization of the A ₁ -Adenosine Receptor System in the Guinea Pig Atrioventricular Node" <i>J. Pharmacol. Exp. Ther.</i> , 1995, 272(3):1024-1035.	
	R22	KOSTYUK, P.G. et al. "Effects of intracellular administration of L-tyrosine and L-phenylalanine on voltage-operated calcium conductance in PC12 pheochromocytoma cells" <i>Brain Res.</i> , 1991, 550:11-14.	
	R23	KRYSTAL, J.H. et al. "NMDA Agonists and Antagonist as Probes of Glutamatergic Dysfunction and Pharmacotherapies in Neuropsychiatric Disorders" <i>Harv. Rev. Psychiatry</i> , Sept.-Oct. 1999, 7(3):125-143.	
	R24	LIPTON, S.A. and P.A. ROSENBERG "Excitatory Amino Acids as a Final Common Pathway for Neurologic Disorders" <i>N. Engl. J. Med.</i> , 1994, 330(9):613-622.	
	R25	MARTYNYUK, A.E. et al. "Blocking effect of intraperitoneal injection of phenylalanine on high-threshold calcium currents in rat hippocampal neurons" <i>Brain Res.</i> , 1991, 552:228-231.	
	R26	MARTYNYUK, A.E. et al. "Adenosine increases potassium conductance in isolated rabbit atrioventricular nodal myocytes" <i>Cardiovasc. Res.</i> 1995, 30:668-675.	

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	R27	MARTYNYUK, A.E. et al. "Hyperkalemia Enhances the Effect of Adenosine on I _{K,Apo} in Rabbit Isolated AV Nodal Myocytes and on AV Nodal Conduction in Guinea Pig Isolated Heart" <i>Circulation</i> , 1999, 99:312-318.	
	R28	MOREY, T.E. et al. "Structure-Activity Relationships and Electrophysiological Effects of Short-Acting Amiodarone Homologs in Guinea Pig Isolated Heart" <i>J. Pharmacol. Exp. Ther.</i> , 2001, 297(1):260-266.	
	R29	MOREY, T.E. et al. "Ionic Basis of the Differential Effects of Intravenous Anesthetics on Erythromycin-induced Prolongation of Ventricular Repolarization in the Guinea Pig Heart" <i>Anesthesiology</i> , 1997, 87:1172-1181.	
	R30	SEUBERT, C.N. et al. "Midazolam Selectively Potentiates the A _{2A} , but not A ₁ , receptor-mediated Effects of Adenosine" <i>Anesthesiology</i> , 2000, 92:567-577.	
	R31	TANAKA, H. et al. "The AMPAR subunit GluR2: still front and center-stage" <i>Brain Res.</i> , 2000, 886:190-207.	
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	R34	GLUSHAKOV, A.V. et al. "L-phenylalanine selectively depresses currents at glutamatergic excitatory synapses" <i>J. Neurosci. Res.</i> , 2003, 72:116-124.	
	R35	GLUSHAKOV, A.V. et al. "Specific inhibition of N-methyl-D-aspartate receptor function in rat hippocampal neurons by L-phenylalanine at concentrations observed during phenylketonuria" <i>Molecular Psychiatry</i> , 2002, 7:359-367.	
	R36	LIECHTY, E.A. et al. "Aromatic amino acids are utilized and protein synthesis is stimulated during amino acid infusion in the ovine fetus" <i>J. Nutrition</i> , 1999, 129:1161-1166.	
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